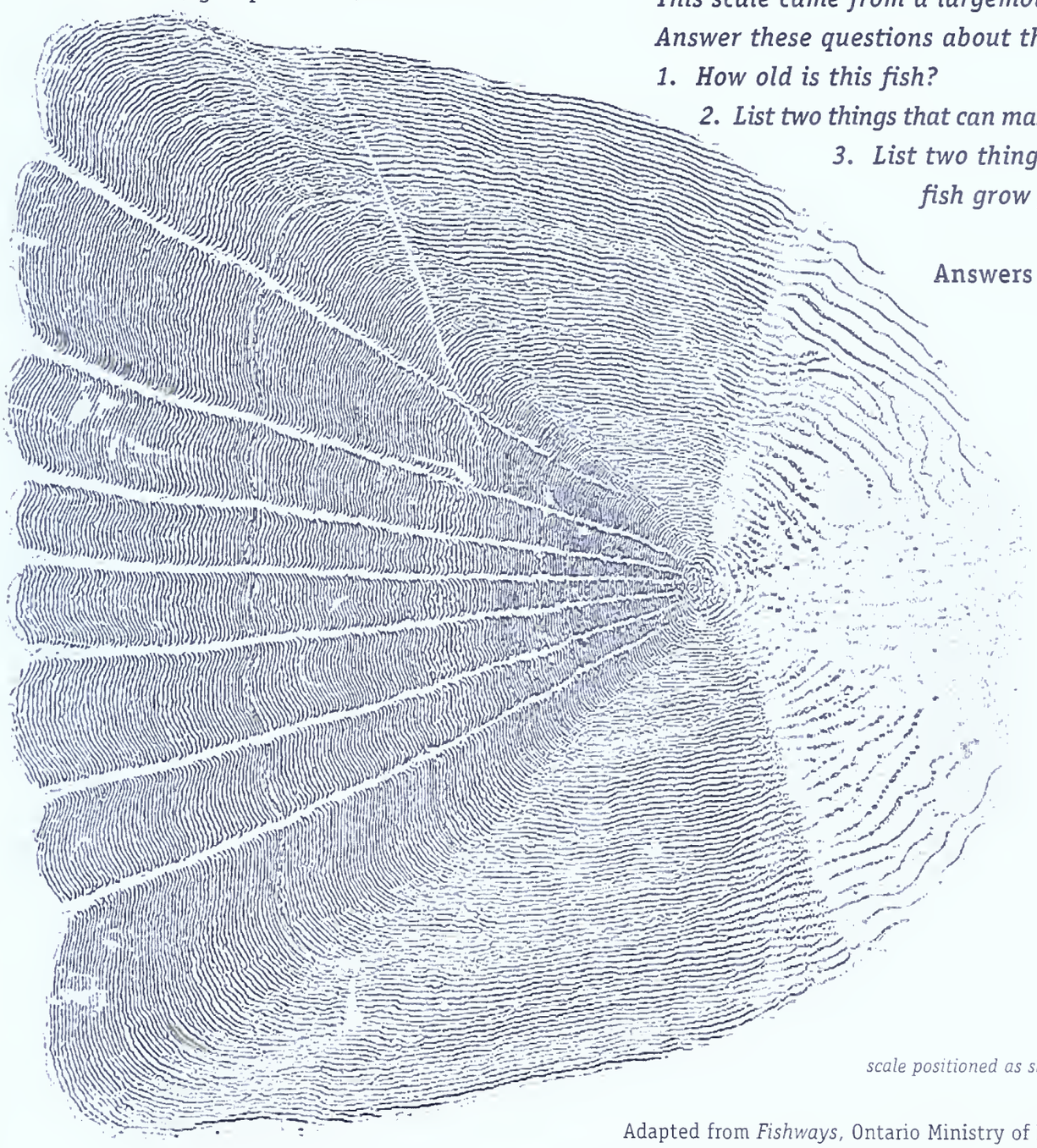
This Fish Has a Scale to Tell

Fish bodies are protected by scales. Scales get bigger when the fish grows. New scales are added to the outside edge as the fish grows. Fish scales add many rings (two, three or up to 20) each year. Lots of rings mean lots of growth. Fishes grow mostly in the warm months. In Pennsylvania, fish don't grow much in the winter. Rings are very close together in the winter. Sometimes the scale doesn't even add a whole ring. Some winter rings may look like they are broken. Fish biologists age fish by counting each time the fish grew slowly. Biologists count each time the rings come close together as one year. That can be very hard to do. It takes lots of practice.

Biologists age scales to learn more about individual fish, groups of fish, and their habitat. They learn about the amount of food available. They also look at how many fish are certain ages. Small fish grow into big fish. If there aren't enough young fish now, there might not be enough big fish in a few years. Age information is used to help make decisions about size limits and stocking.



scale positioned as shown in photograph above

This scale came from a largemouth bass.

Answer these questions about the scale:

1. ***How old is this fish?***
2. ***List two things that can make fish grow slowly?***
3. ***List two things that can make fish grow fast?***

Answers on the other side.

Adapted from *Fishways*, Ontario Ministry of Natural Resources, 1995

"This Fish Has a Scale to Tell" answers:

1. This fish is three years old.
2. Cold water temperature, lack of food, stress from pollution, spawning stress.
3. Water temperatures that are just right, lots of food.